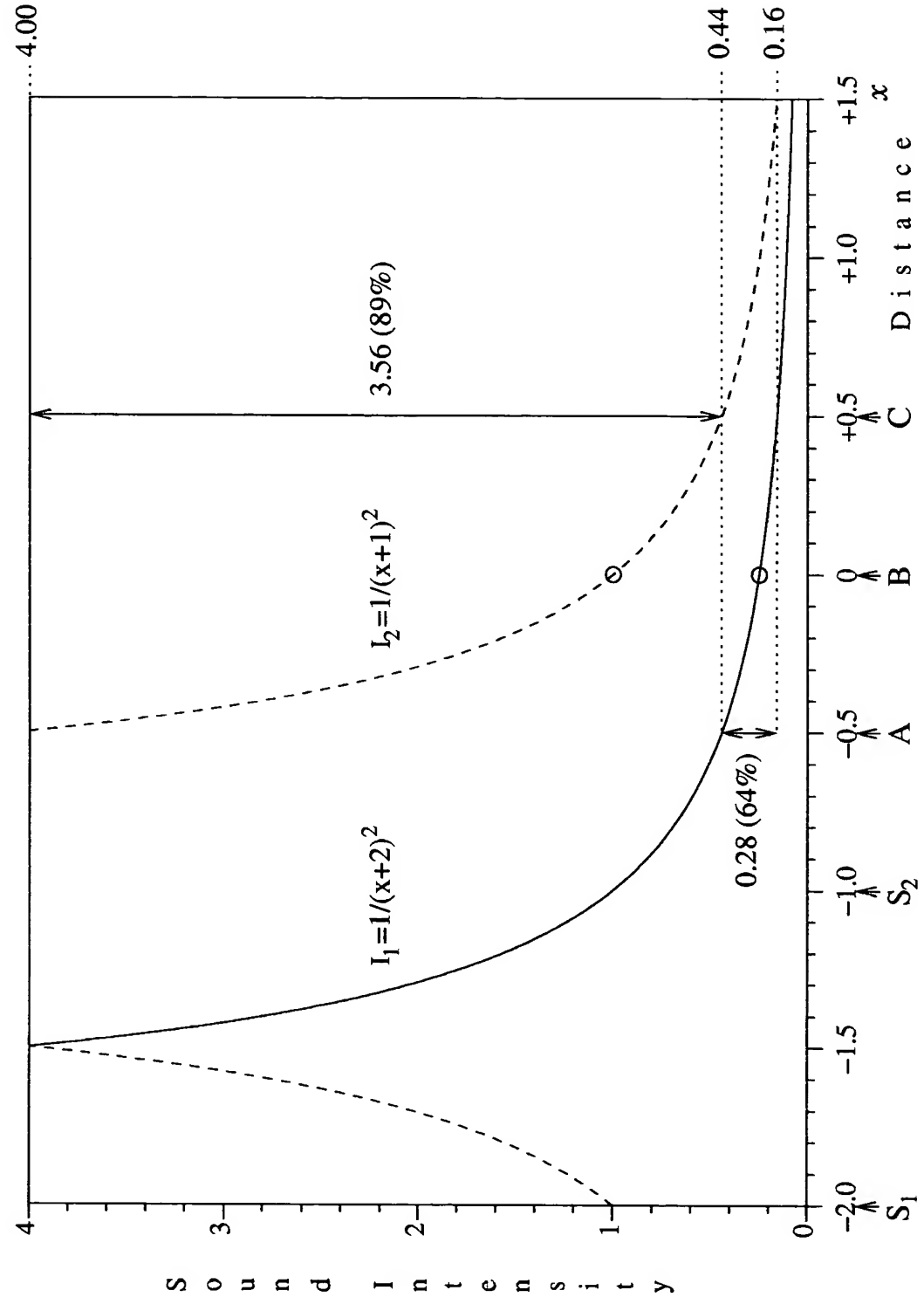
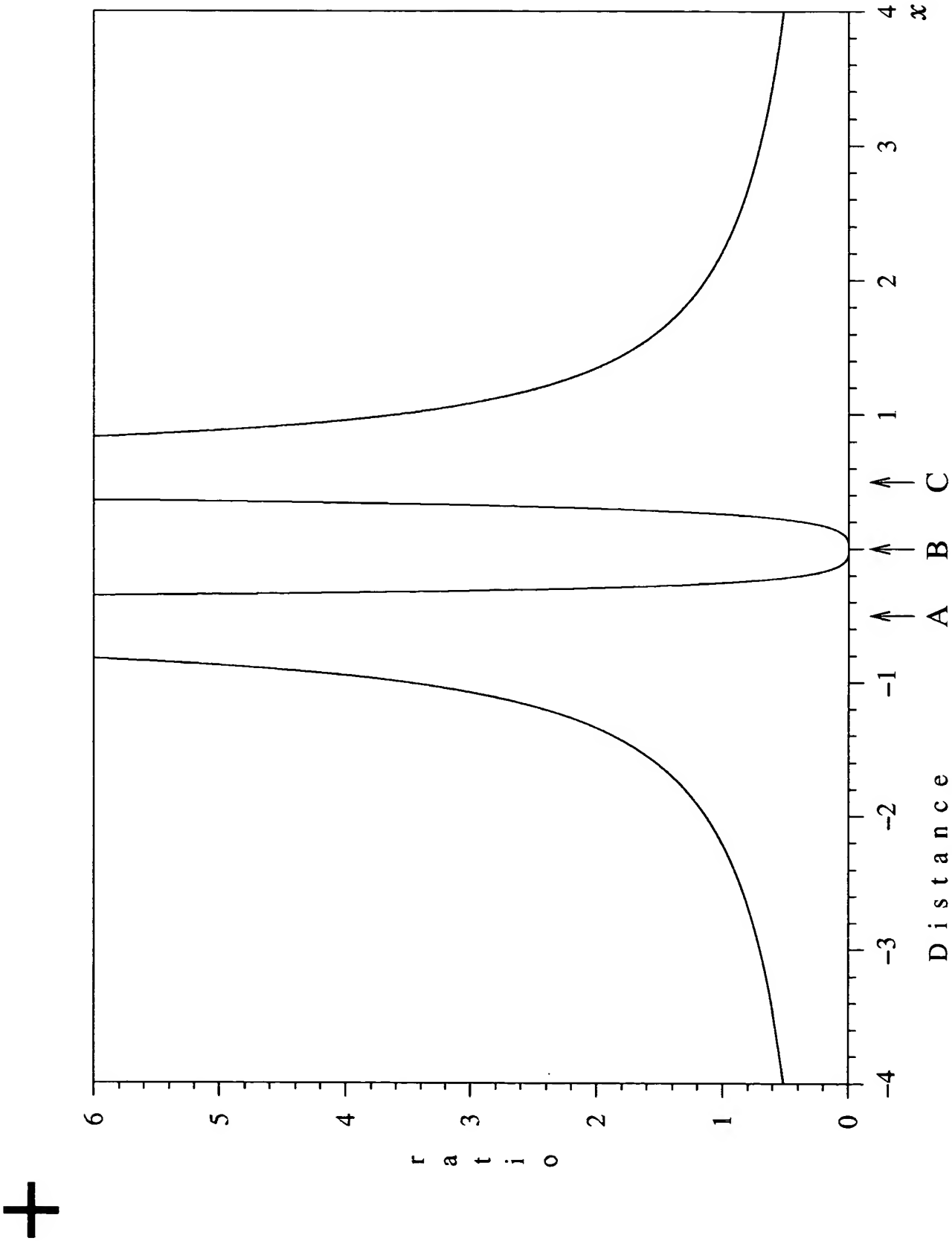
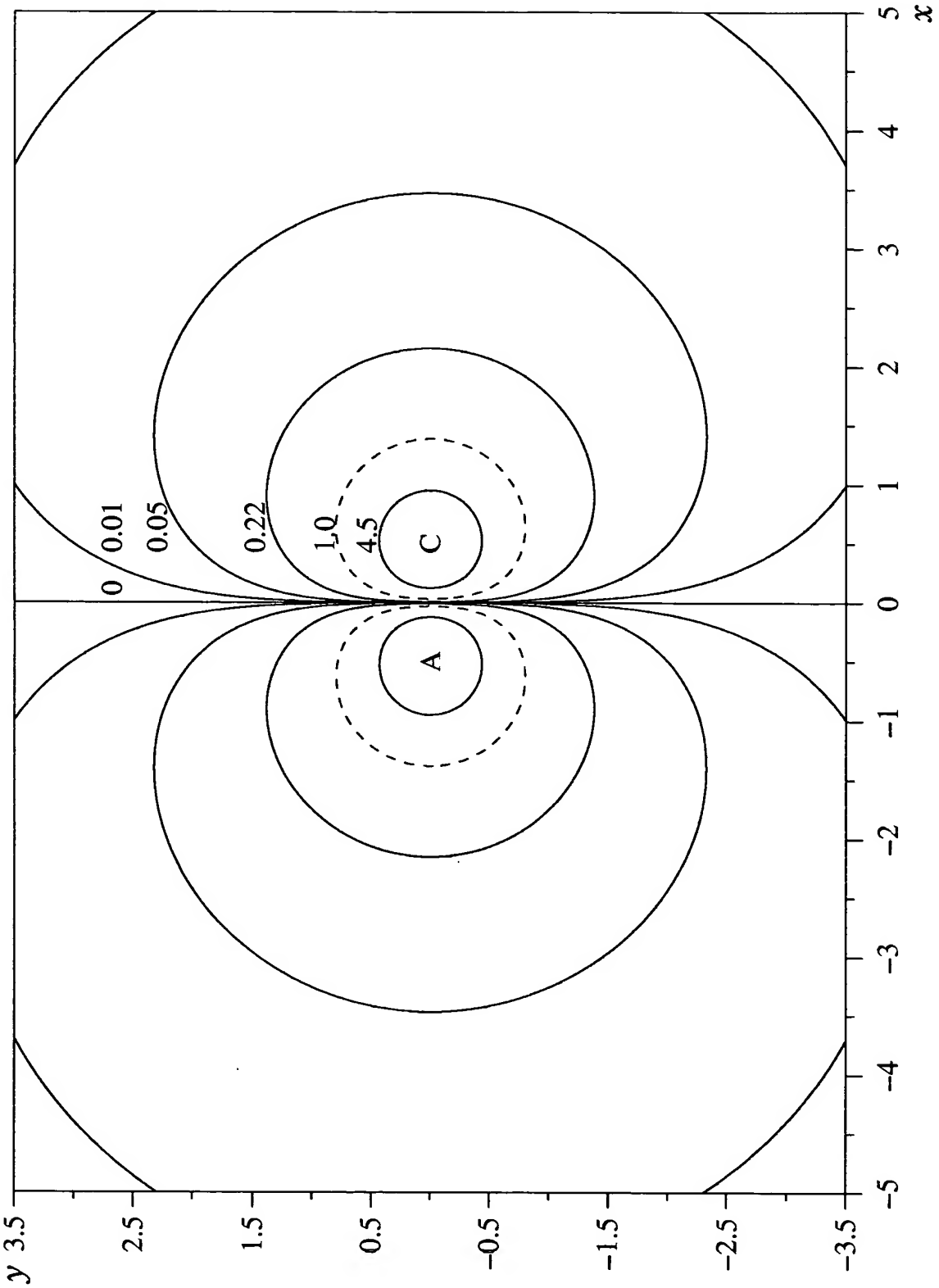
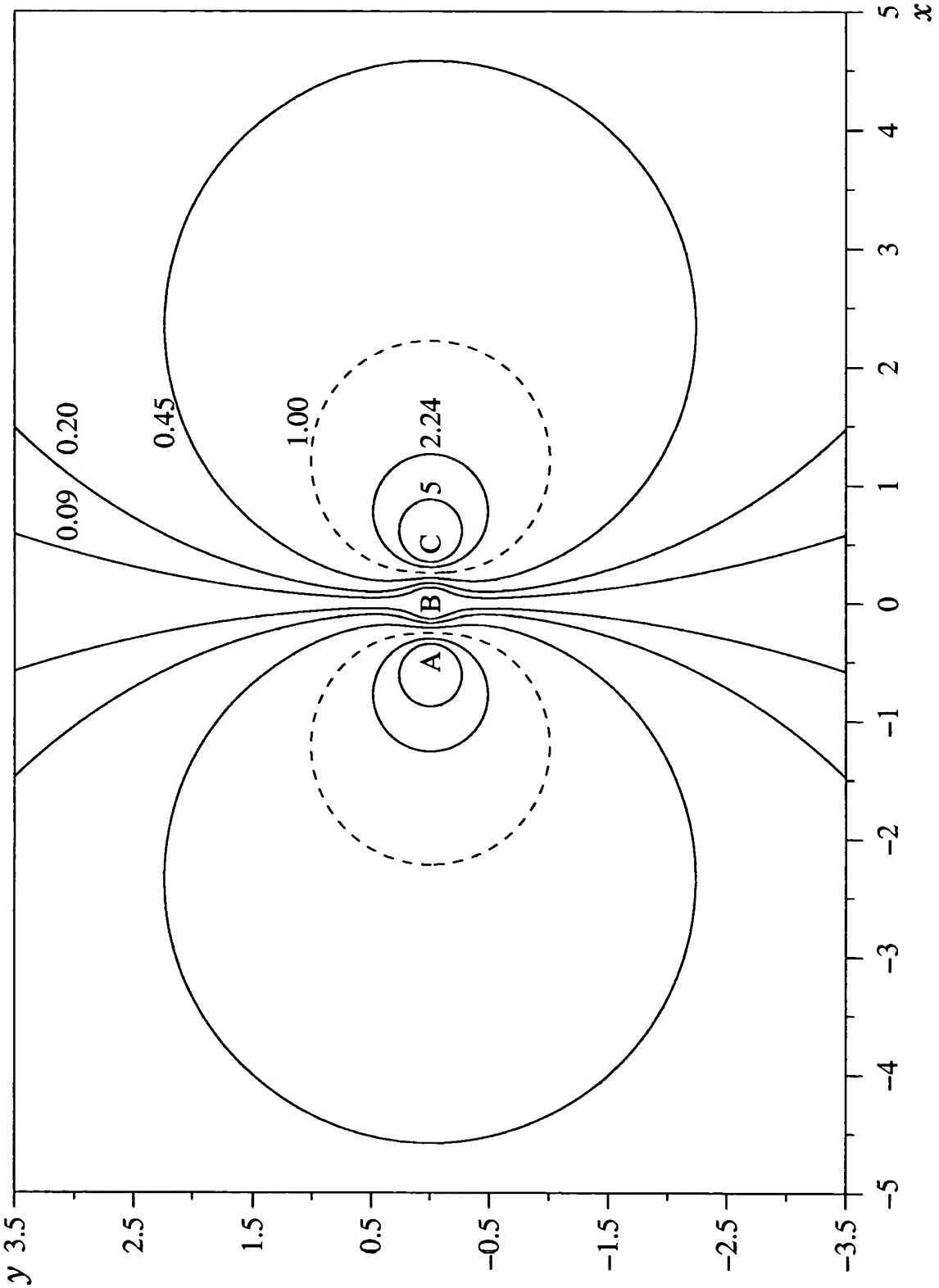
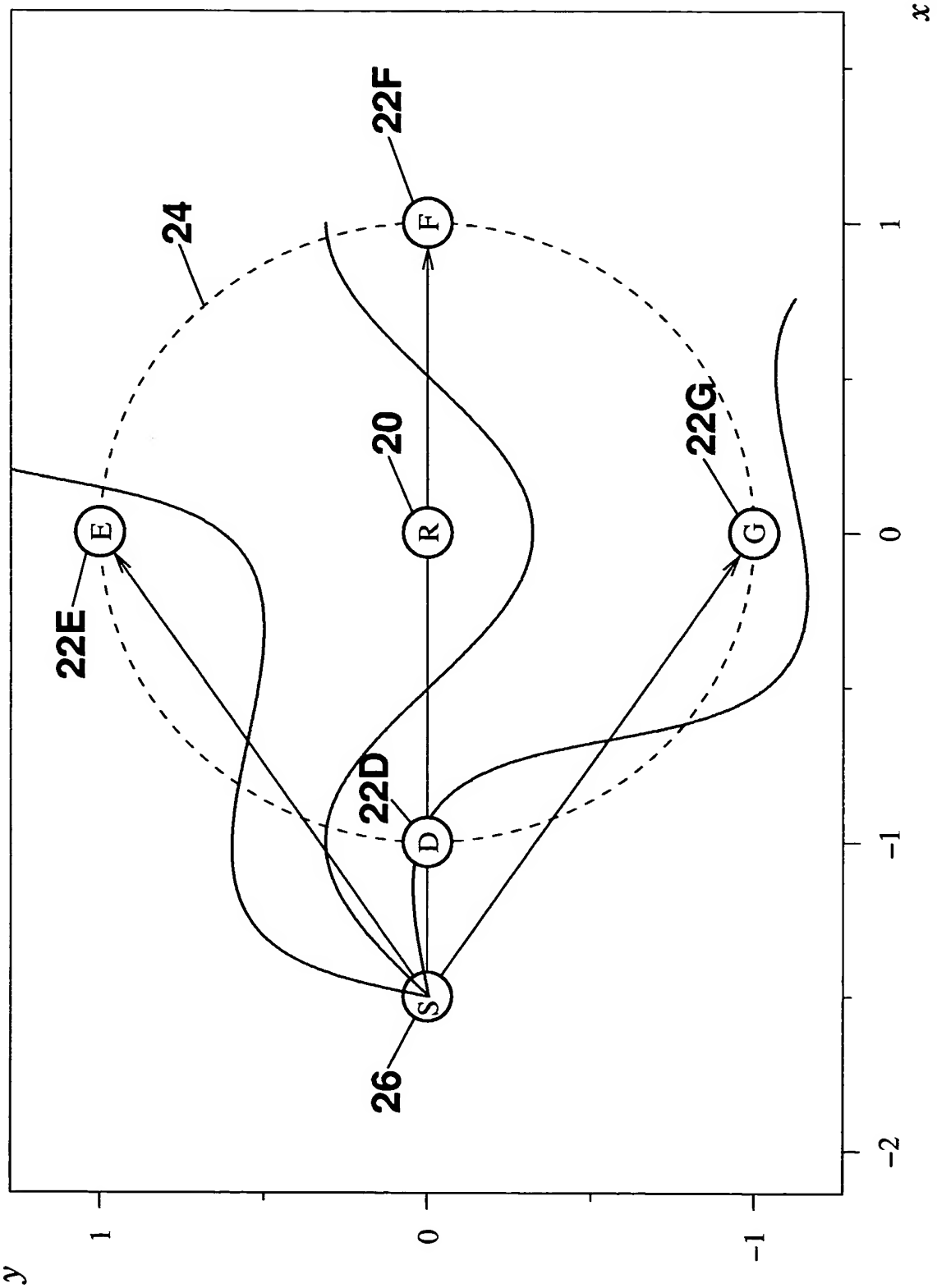
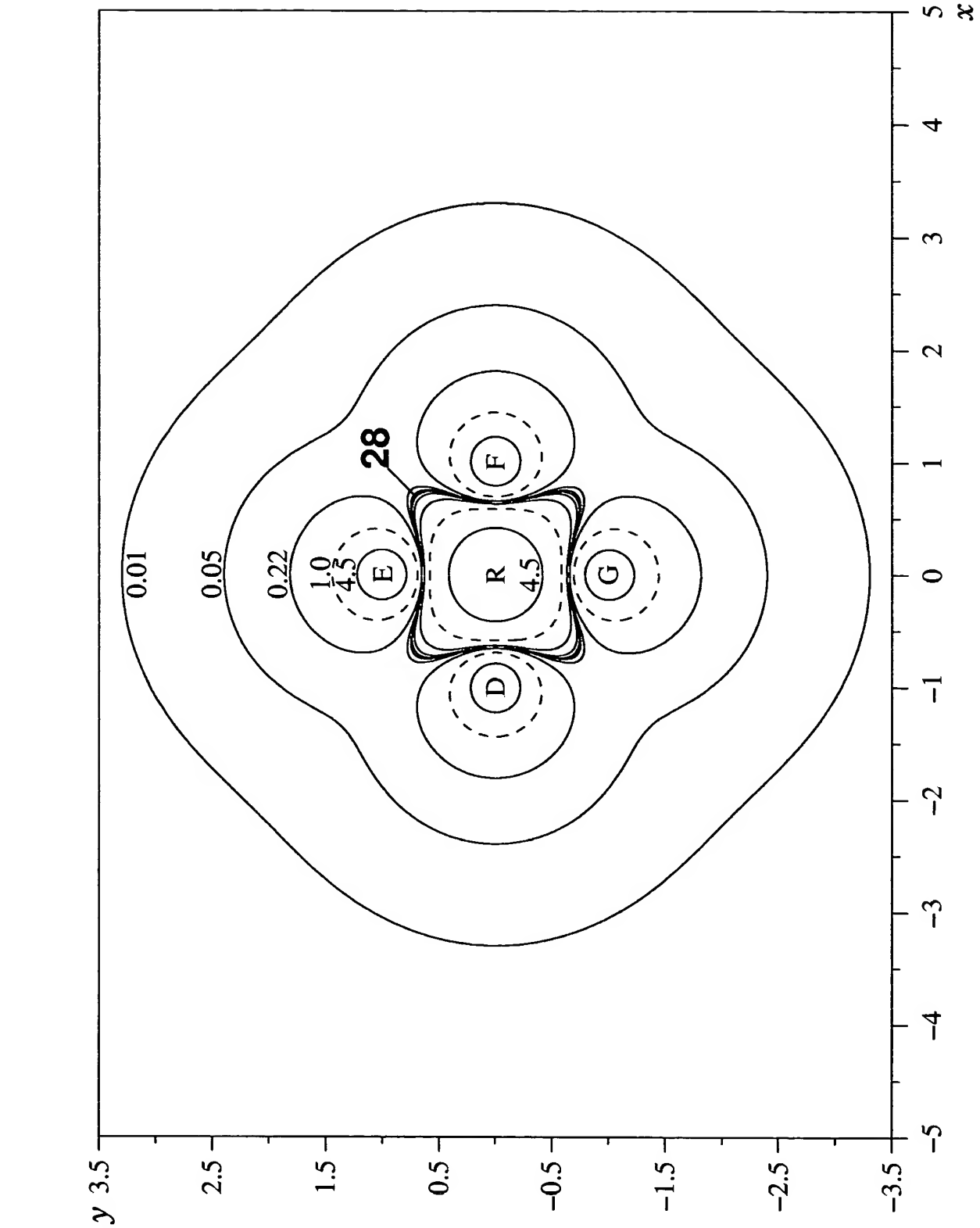

4.00
0.44
0.16
3.56 (89%)
$I_2=1/(x+1)^2$
$I_1=1/(x+2)^2$
0.28 (64%)
Sound Intensity
Distance x
S_1
S_2
A
B
C
−2.0
−1.5
−1.0
−0.5
0
+0.5
+1.0
+1.5
0
1
2
3
4

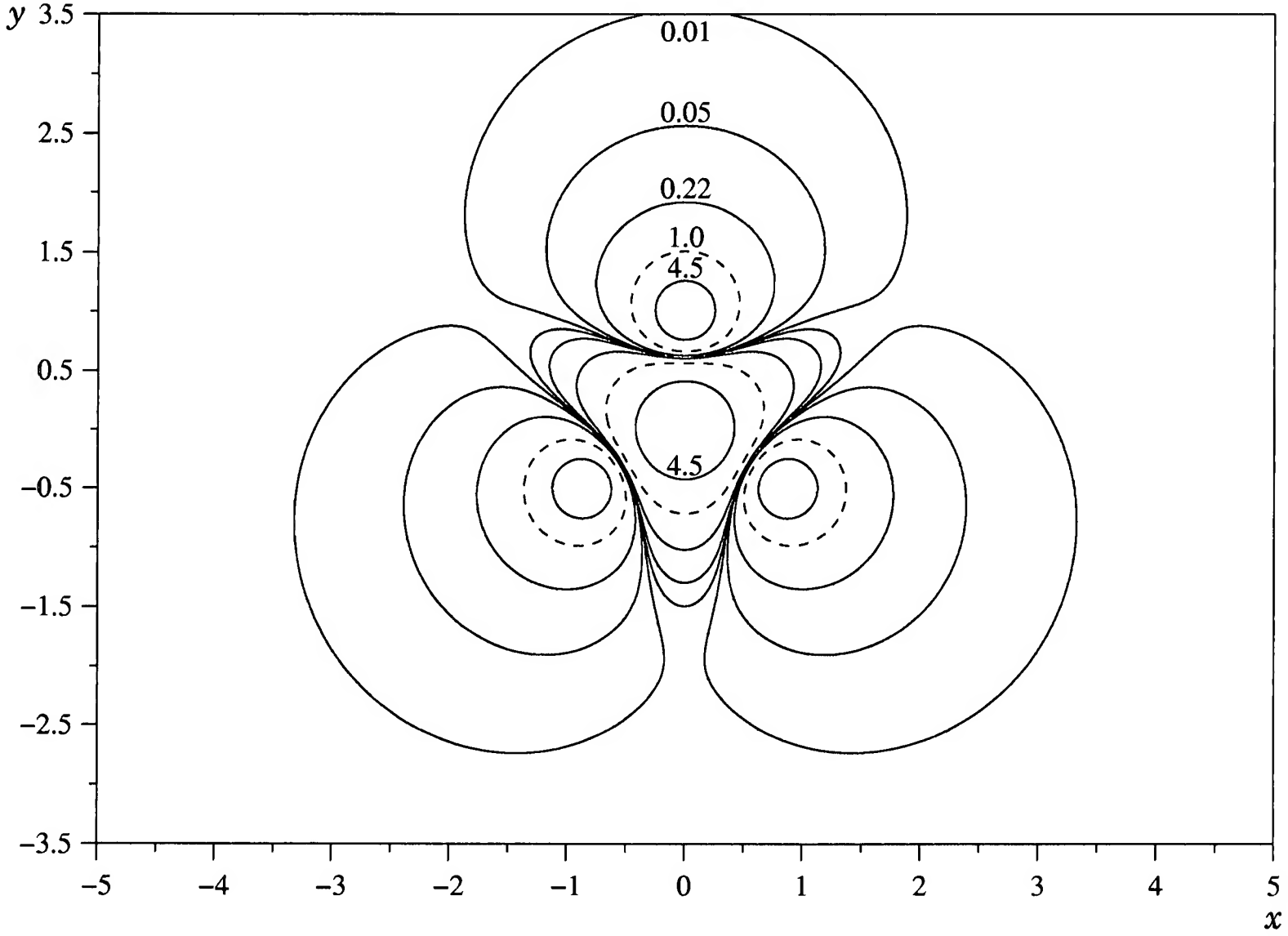

ratio
0
1
2
3
4
5
6
−4
−3
−2
−1
1
2
3
4
x
A
B
C
Distance

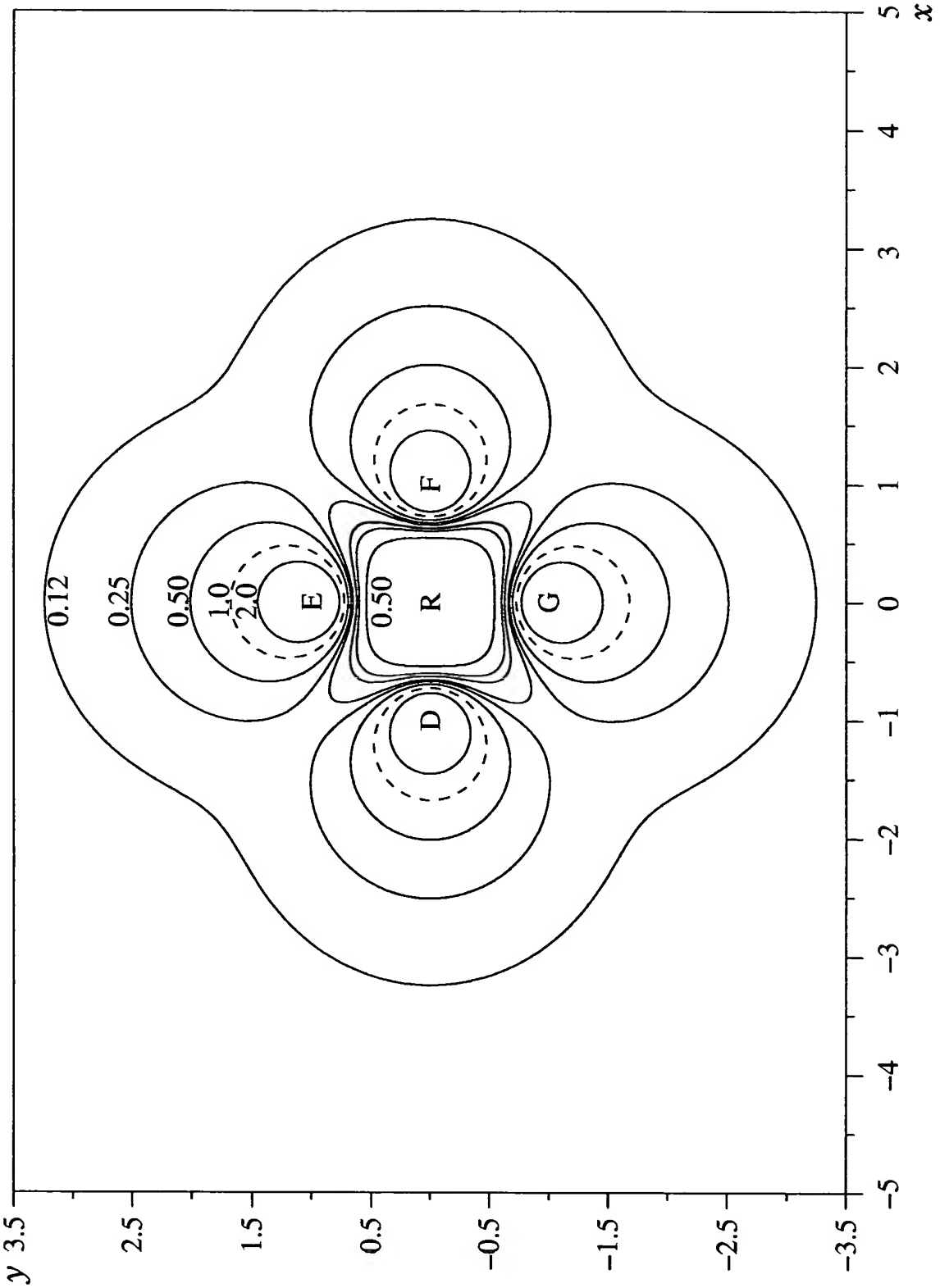

0
0.01
0.05
0.22
1.0
4.5
C
A
x
y
5
4
3
2
1
0
-1
-2
-3
-4
-5
3.5
2.5
1.5
0.5
-0.5
-1.5
-2.5
-3.5

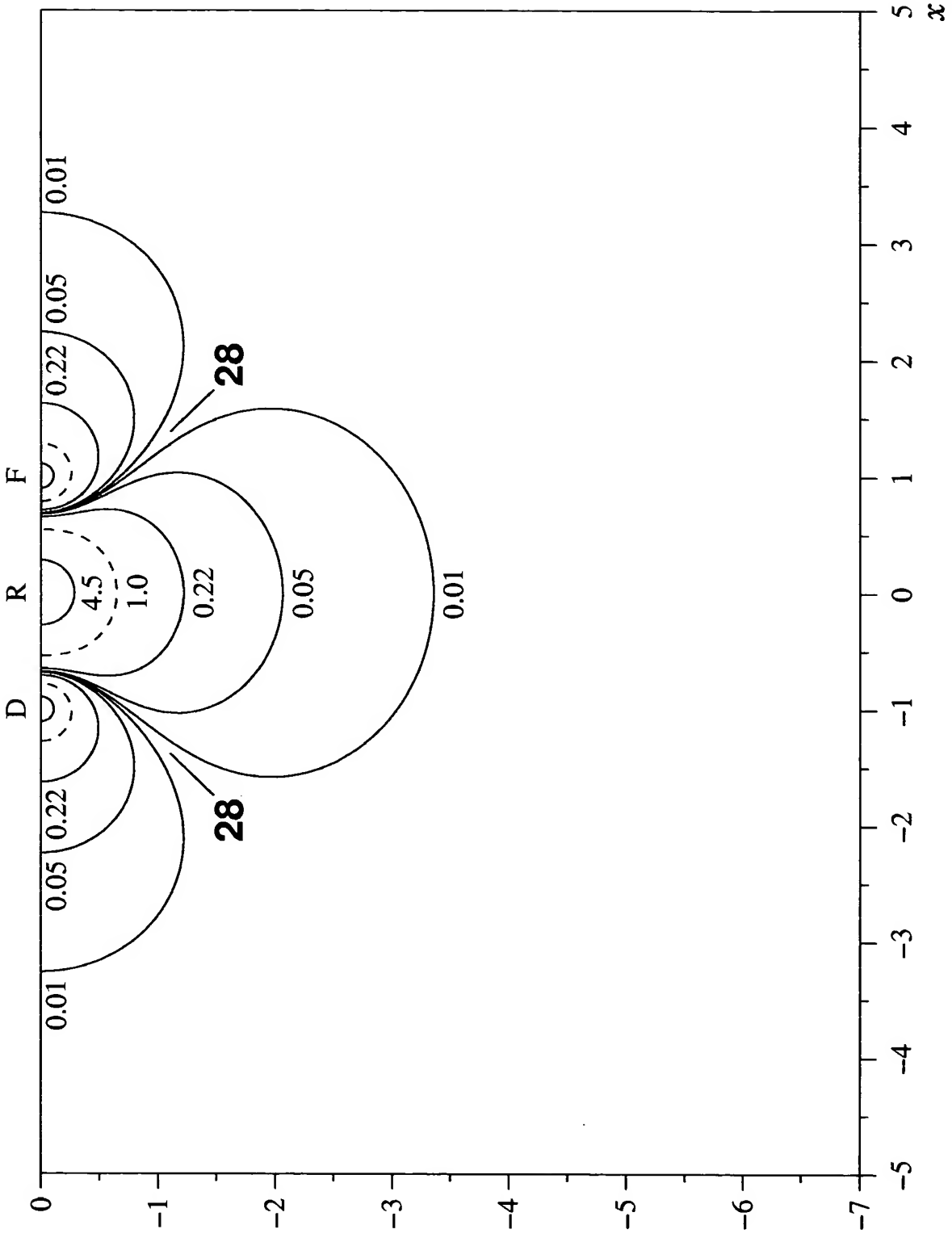

0.09
0.20
0.45
1.00
2.24
5
A
B
C
x
y
5
4
3
2
1
0
−1
−2
−3
−4
−5
3.5
2.5
1.5
0.5
−0.5
−1.5
−2.5
−3.5

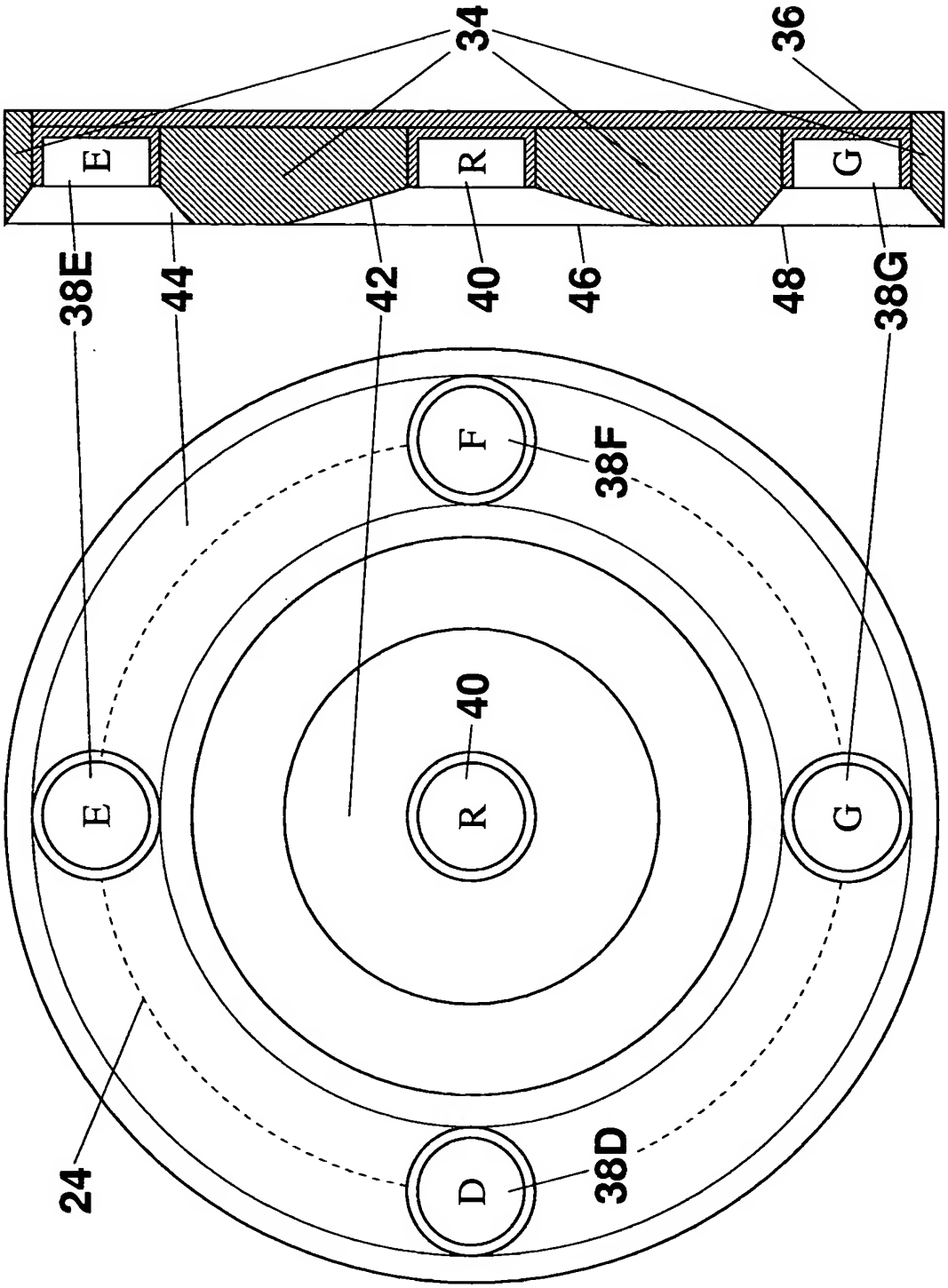

22F
24
20
22G
22E
22D
26
E
F
R
G
D
S
1
0
-1
-2
y
x

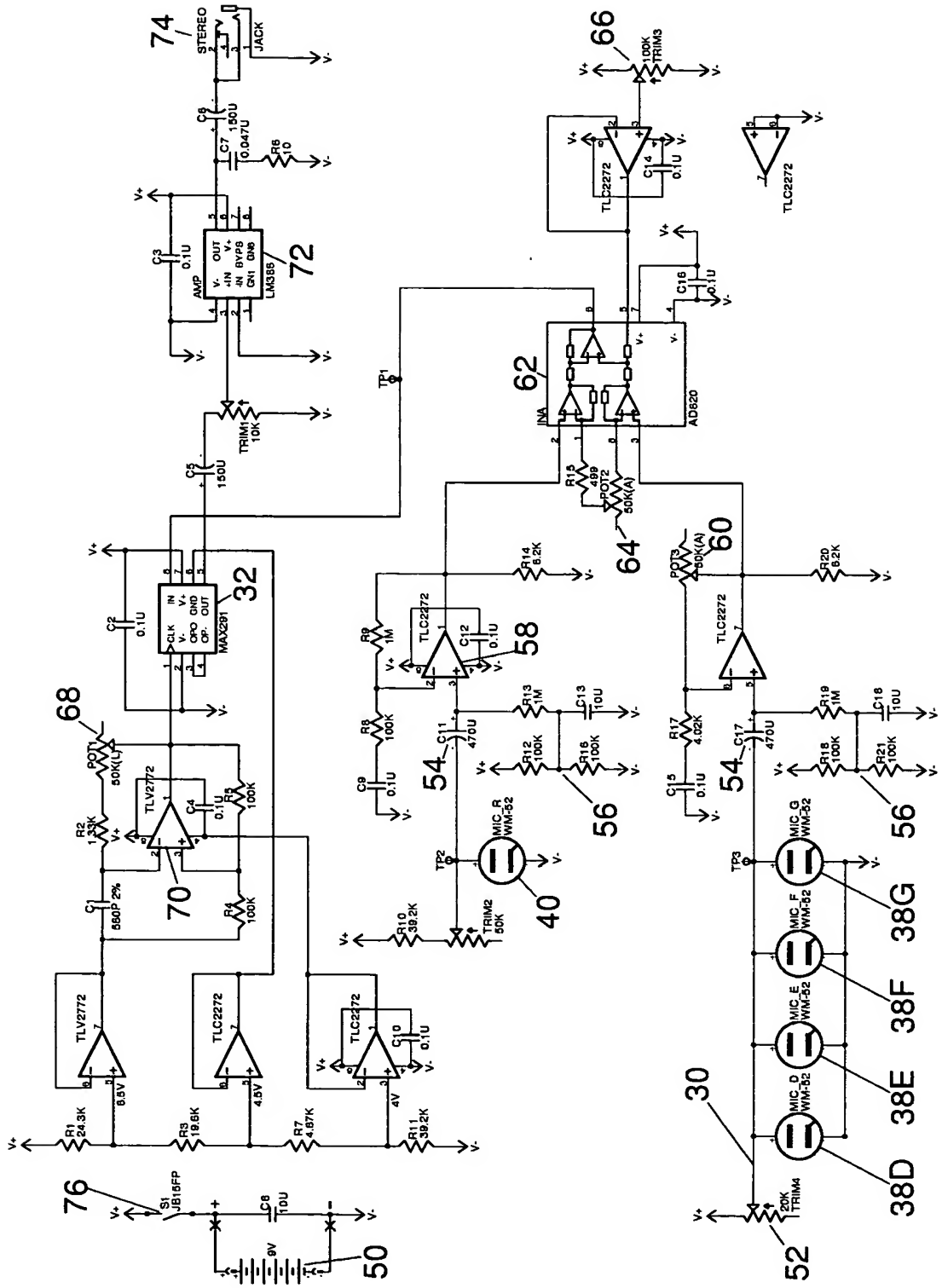

0.01
0.05
0.22
1.0
4.5
28
D
E
F
G
R
4.5
y
x
3.5
2.5
1.5
0.5
−0.5
−1.5
−2.5
−3.5
5
4
3
2
1
0
−1
−2
−3
−4
−5

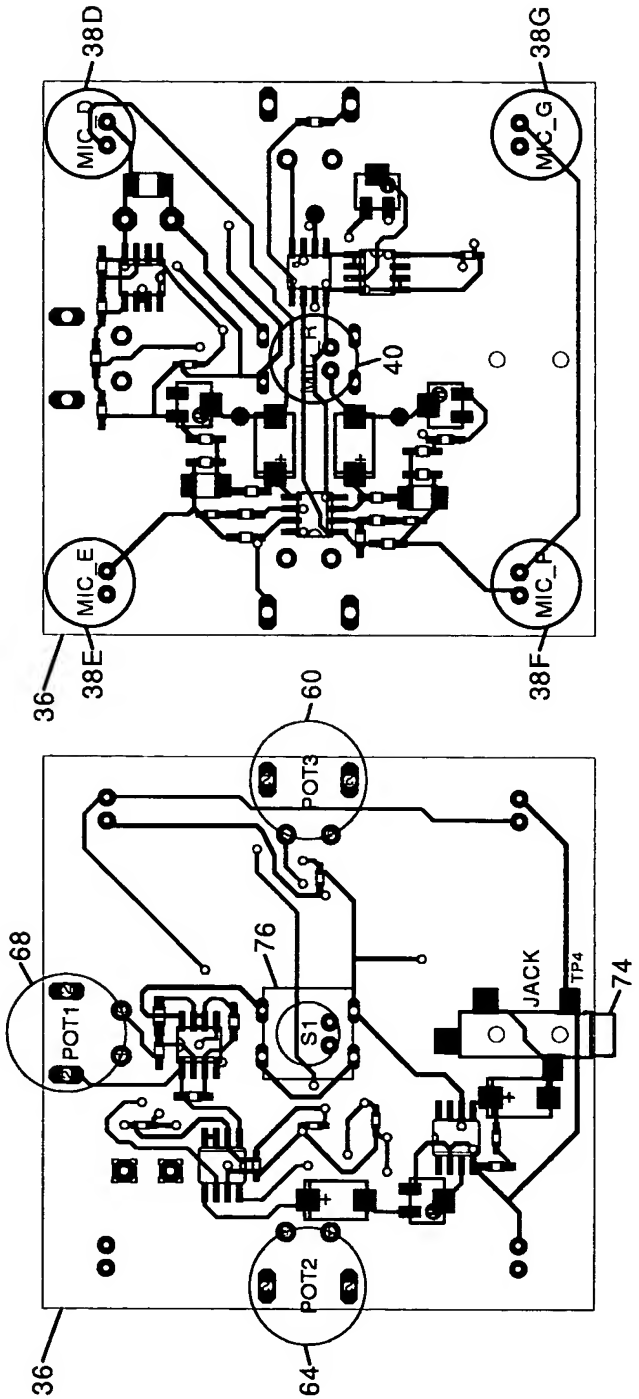

y
3.5
2.5
1.5
0.5
−0.5
−1.5
−2.5
−3.5
0.01
0.05
0.22
1.0
4.5
4.5
−5
−4
−3
−2
−1
0
1
2
3
4
5
x

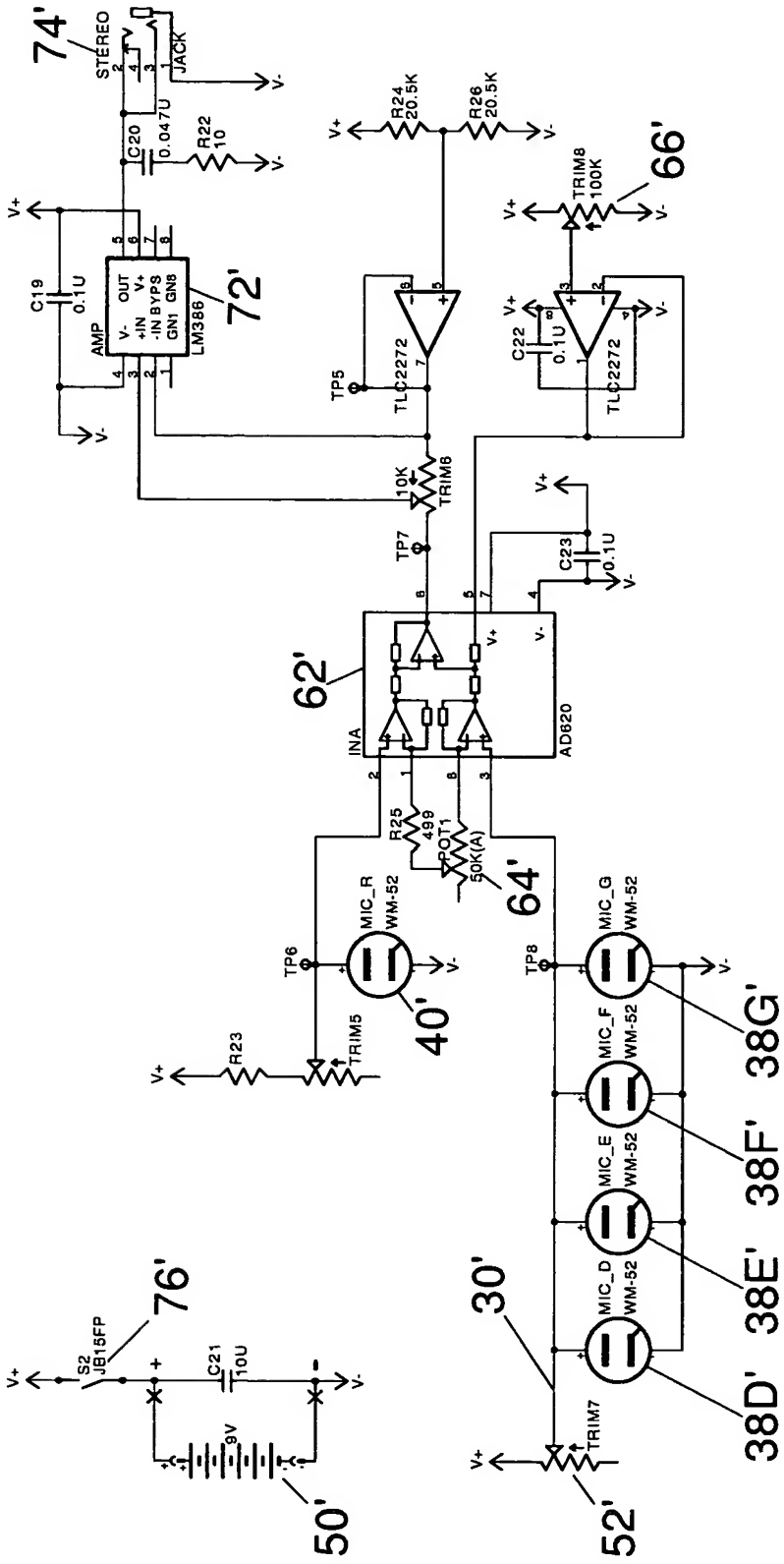

0.12
0.25
0.50
1.0
2.0
E
0.50
R
F
D
G
x
y
5
4
3
2
1
0
−1
−2
−3
−4
−5
3.5
2.5
1.5
0.5
−0.5
−1.5
−2.5
−3.5


D
R
F
28
28
0.01
0.05
0.22
1.0
4.5
z
x


34
36
E
R
G
38E
44
42
40
46
48
38G
F
38F
40
E
R
G
24
D
38D


74
STEREO
JACK
C9 150U
C7 0.047U
R6 10
C3 0.1U
AMP
LM386
72
TRIM1 10K
C5 150U
66
100K TRIM3
TLC2272
C14 0.1U
C16 0.1U
62
INA
AD620
TP1
R15 499
POT2 50K(A)
64
60
POT3 50K(A)
R20 8.2K
R14 8.2K
C2 0.1U
MAX291
32
68
POT1 50K(L)
R2 1.33K
TLV2772
C4 0.1U
R5 100K
C1 560P 2%
70
R4 100K
R8 1M
TLC2272
C12 0.1U
58
R8 100K
C11 470U
R13 1M
C13 10U
R12 100K
R16 100K
C9 0.1U
54
56
MIC_R WM-52
TP2
40
R10 39.2K
TRIM2 50K
R17 4.02K
C17 470U
R19 1M
C18 10U
C15 0.1U
R18 100K
R21 100K
MIC_G WM-52
TP3
38G
MIC_F WM-52
38F
MIC_E WM-52
38E
MIC_D WM-52
38D
30
TRIM4 20K
52
R1 24.3K
R3 19.6K
R7 4.87K
R11 39.2K
6.5V
4.5V
4V
TLV2772
TLC2272
TLC2272
C10 0.1U
76
S1 JB15FP
C8 10U
9V
50


38D
MIC_D
38G
MIC_G
40
MIC_E
MIC_F
38E
38F
36
60
POT3
68
76
JACK
TP4
74
POT1
S1
POT2
64
36


74'
STEREO
JACK
C20
0.047U
R22
10
V+
V-
C19
0.1U
AMP
LM386
72'
R24
20.5K
R26
20.5K
66'
TRIM8
100K
C22
0.1U
TLC2272
TP5
10K
TRIM6
TP7
C23
0.1U
62'
INA
AD620
R25
499
POT1
50K(A)
64'
MIC_R
WM-52
TP6
40'
R23
TRIM5
TP8
MIC_G
MIC_F
MIC_E
MIC_D
38G'
38F'
38E'
38D'
30'
TRIM7
52'
S2
JB15FP
76'
C21
10U
9V
50'